



RECOMMENDATION

SYDNEY METRO
CATCHMENT ACTION PLAN

June 2008



RECOMMENDATION

SYDNEY METRO CATCHMENT ACTION PLAN

Enquiries

Enquiries about this report should be directed to:

Tim Kirby

Phone (02) 8227 4328

E-mail Tim.Kirby@nrc.nsw.gov.au

Postal address GPO Box 4206, Sydney NSW 2001

List of acronyms

BBCCI	Botany Bay Coastal Catchment Initiative
CAP	Catchment Action Plan
CMA	Catchment Management Authority
DECC	Department of Environment and Climate Change
DOP	Department of Planning
DPI	Department of Primary Industries
DWE	Department of Water and Energy
JSC	Joint Steering Committee
MER	Monitoring Evaluation and Reporting
NRC	Natural Resources Commission
NRM	Natural Resource Management
NSW	New South Wales
SMCMA	Sydney Metro Catchment Management Authority

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, table or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

Document No. D08/1272

ISBN: 978 1 921050 37 4

Table of Contents

1	Introduction and overview	5
1.1	Overview of findings	5
1.2	NRC's recommendation	6
1.3	Process used to develop this advice	7
1.4	Structure of this document	8
2	NRC's assessment of the CAP	9
2.1	Is the CAP consistent with the Standard for Quality NRM?	10
2.2	Are the CAP targets likely to promote the state-wide targets?	14
2.3	Does the CAP meet other government requirements?	15
3	NRC's assessment of the CMA's capacity to improve the CAP over time	18
3.1	The CMA's plans to improve the CAP	18
4	NRC's recommendation	21
4.1	How should the CMA demonstrate progress?	22
4.2	How will progress be monitored?	22
4.3	What can the government do to support this CMA?	23

1 Introduction and overview

The Natural Resources Commission (NRC) has reviewed the Sydney Metro Catchment Action Plan (CAP) and recommends that this CAP be approved. The NRC further recommends that the Minister require the Catchment Management Authority (CMA) to undertake a review of the Catchment Action Plan within 18 months of approval to incorporate its progress on the specific actions identified in this report. Sydney Metro CMA operates in a highly urbanised coastal setting. The CMA's situation is unique amongst other NSW CMAs, in that it is a small player and to achieve significant NRM outcomes it must collaborate with other larger NRM managers in the region, who have access to significant resources. It is therefore appropriate that the CAP identifies that the main activities for the CMA are to facilitate and coordinate NRM activities in the catchment region.

CAPs are an important component of the institutional model for delivering natural resource management (NRM) in NSW. Under this model, 13 CMAs are responsible for planning and investing in NRM within their catchments. Each CMA has developed a CAP to use as a 10-year strategic plan or 'investment portfolio' for NRM in its region. These CAPs should set clear directions for all NRM activities in their regions and should integrate other NRM plans, including regional strategies, water sharing plans and regional conservation plans. Ultimately, the CAPs should set the direction for an integrated, whole-of-government approach to achieving catchment and state-wide targets, and should become the primary vehicle for public and private investment in NRM. In this way, CAPs support and facilitate achievement of the NSW State Plan, and the objectives of the Australian Government's *Caring for Our Country* program.

The NRC is required to advise the Minister for Climate Change and Environment on whether or not to approve the CAP prepared by each CMA. Specifically, the NRC must determine whether each CAP complies with the *Standard for Quality Natural Resource Management*¹ (the Standard) and promotes the state-wide targets for NRM.²

In addition, the NRC agreed to consider whether each CAP fulfils other specific requirements nominated by the NSW Government and Joint Steering Committee (JSC).³

1.1 Overview of findings

The NRC's recommendation is based on its findings that the Sydney Metro CAP:

- demonstrates a reasonable level of compliance with the Standard at this point in time
- provides some confidence that the CAP targets will promote the achievement of the state-wide targets over time.

¹ Natural Resources Commission (2005) *Standard for Quality Natural Resource Management*. Available at www.nrc.nsw.gov.au.

² Natural Resources Commission (2005) *Recommendations: state-wide standard and targets*. Available at www.nrc.nsw.gov.au.

³ Including the priorities set by the Australian Government and NSW Government Natural Resource Management Joint Steering Committee, NSW Department of Environment and Climate Change, NSW Department of Primary Industries, NSW Department of Planning, NSW Department of Department of Water and Energy.

The CAP also fulfils all legislative and most other specific government requirements, however many of the targets are not yet completely SMART.⁴ The CMA has plans in place that should improve the measurability and information supporting the achievability of the targets over time. It appears that the targets within the CAP will contribute to the objectives of the Australian Government's *Caring for Our Country* program and the three national priorities within it that are relevant to the SMCMA region i.e. "biodiversity and national icons", "coastal environments and critical aquatic habitats", and "community skills, knowledge and engagement".

The NRC believes that the Sydney CMA can continue to refine its CAP and targets and successfully work with its community to facilitate and coordinate the implementation of the CAP as:

- it has good plans to improve its compliance with the Standard and increase its organisational capabilities
- the CMA demonstrated improved results in the October 2007 NRC Systems Review⁵
- the recommended actions will focus the CMA on the key areas that require improvement
- the NRC will periodically review the CMA's progress.

The NRC considers that to successfully implement the CAP, the Sydney Metro CMA will require support from the Government. This support will be necessary to:

- develop an effective monitoring and evaluation program, given the limited funding available and historic lack of clarity on roles and responsibilities for monitoring and evaluation in NSW
- facilitate and coordinate the NRM activities required to achieve the targets for the region, given the complexity of institutional, NRM and land use planning arrangements in the region, the population pressures in the catchment region and the coastal location
- enable the CMA to enhance its information management systems.

1.2 NRC's recommendation

In accordance with Section 13 (b) of the *Natural Resources Commission Act 2003*, the NRC recommends that the Minister approve the Sydney Metro Catchment Action Plan⁶ without alteration.

The NRC further recommends that the Minister require the CMA⁷ to undertake a review of the Catchment Action Plan within 18 months of approval to incorporate its progress on the following actions:

- a) advancing its processes for transparent decision-making, at all levels of the CMA, that comply with the Standard

⁴ 'Specific, Measurable, Achievable, Relevant and Timebound' (SMART), see below for further details.

⁵ The Systems Review means a review carried out on the CMA's business systems. More information on the Systems Review process is available at <http://www.nrc.nsw.gov.au>.

⁶ Under Section 23 (1) of the *Catchment Management Authorities Act 2003*.

⁷ Under Section 26 (1) of the *Catchment Management Authorities Act 2003*.

- b) undertaking “high level stakeholder engagement to refine investment priorities and to maximise commitment to agreed region-wide targets and collaborative actions.”⁸
- c) completing and implementing the *Stakeholder Liaison Strategy*, particularly focussed at the essential partners identified in the CAP, and include the key principles of this Strategy in the CAP
- d) completing and implementing the *Community Consultation Strategy*
- e) continuing its plans to undertake a risk audit at the operational level, and to complete and implement the *Implementation Risk Management Strategy* to ensure a comprehensive system for identifying, assessing and managing risks
- f) completing and implementing the *Monitoring, Evaluation and Reporting Strategy* including the *Adaptive Management Strategy*.⁹

The NRC’s recommendation is explained in more detail in Chapter 4.

Successful completion of these actions should enable the CMA to prepare and publish a revised CAP that will more fully comply with the Standard and significantly increase the likelihood of the CAP promoting achievement of the state-wide targets.

The NRC will undertake an audit within 2 years of approval.¹⁰ To support this, the NRC will require a letter from the CMA to report their progress on the above actions on a 6-monthly basis.¹¹ If reasonable progress in completing the recommended actions is not evident from these letters, the NRC will consider bringing the audit forward.

1.3 Process used to develop this advice

The NRC developed its recommendation using a rigorous process developed in consultation with NSW Government agencies and the JSC, and subsequently endorsed by the CMA Chairs.

The process included:

- identifying the needs of all government stakeholders and developing a single process to meet all of these needs
- meeting with the Sydney Metro CMA to help it prepare for the CAP review, and undertaking a formal review of the CMA’s business systems (the ‘Systems Review’) to identify what changes to these systems were needed to comply with the Standard
- providing follow-up support to the CMA to help it make the necessary changes to its business systems, and to assist with strategic planning

⁸ *Sydney Metropolitan Catchment Management Authority Catchment Action Plan* (2008), p4.9

⁹ The continued development of the Monitoring, Evaluation and Reporting Strategy should ensure the CMA develops targets which are more ‘Specific, Measurable, Achievable, Relevant and Timebound’ (SMART). See Natural Resource Management Ministerial Council (2002) National Framework for Natural Resource Management (NRM) Standards and Targets. Available at <http://www.nrm.gov.au/publications/standards/index/html>.

¹⁰ Under Section 13 (c) of the *Natural Resources Commission Act 2003*, and consistent with the ‘Framework for Auditing the Implementation of Catchment Action Plans’ (NRC, 2007)

¹¹ Under Section 16 (3) of the *Natural Resources Commission Act 2003*.

- evaluating the draft CAP and supporting documents for compliance with the Standard, likelihood of promoting achievement of the state-wide targets, and fulfilment of NSW legislative requirements and other government requirements
- discussing the NRC's initial findings and recommendation with the CMA and relevant government agencies; and finalising this advice.

In evaluating all CMAs' CAPs and formulating its advice, the NRC took into account that the CMAs are relatively new organisations, and that many aspects of the institutional model for NRM are still developing. When the CMAs were established in late 2003 (the SMCMA took over the activities of the Upper Parramatta River Catchment Trust in 2006), they were responsible for implementing on-ground activities in accordance with pre-existing Catchment Blueprints^{12 13}. In May 2005 the NSW Government adopted the Standard and a set of state-wide targets for NRM.¹⁴ The CMAs have been required to modify their operations according to the Standard, and to develop their CAPs and the next investment programs in accordance with this. Over time, application of the Standard should underpin continuous improvement in all CMAs and their CAPs.

The NRC also acknowledges that there will be variations between the CMAs' CAPs. This is because the institutional model promotes regional decision-making and allows flexibility and innovation. It is also due to the fact that each CMA is at a different stage of organisational development. Given this, the NRC assessed the Sydney Metro CAP with regard to the Sydney Metro CMA's current stage of development and its unique characteristics; for example, that:

- its designated role overlaps with the perceived and actual roles of multiple other organisations at all levels of government, and in the private and community sectors, and
- the key spatial context is the extent of urban development, rather than the nominal catchment boundary.

1.4 Structure of this document

This rest of this document explains the NRC's recommendation in more detail:

- Chapter 2 sets out the NRC's assessment of the CAP against all requirements
- Chapter 3 sets out the NRC's assessment of whether the Sydney Metro CMA will improve its CAP and its compliance with the Standard and likelihood of promoting the state-wide targets over time
- Chapter 4 sets out the NRC's recommendation and actions to focus the CMA on the key areas that require improvement, and outlines how the NRC proposes to monitor progress.

¹² These 21 Catchment Blueprints were developed in 2002 by advisory Catchment Management Boards.

¹³ Sydney Metro CMA Board was established in January 2006.

¹⁴ Natural Resources Commission (2005) *Recommendations: state-wide standard and targets*. Available at <http://www.nrc.nsw.gov.au>.

2 NRC's assessment of the CAP

The NRC assessed the Sydney Metro CAP to determine whether it is a good strategic plan that complies with the Standard and will guide the Sydney Metro CMA in promoting achievement of the state-wide targets. In particular, it:

- examined the process the Sydney Metro CMA used to develop the CAP, and the resulting CAP, and evaluated these against the Standard
- assessed the CAP targets to determine whether they promote achievement of the state-wide targets
- assessed whether the CAP fulfils NSW legislative requirements and reflects other specific government requirements.

Overall, the NRC considers that the Sydney Metro CAP contains some elements of a good strategic plan. The CAP demonstrates a reasonable level of compliance with the Standard for this point in time and has plans in place to improve compliance over time. The NRC has some confidence that it will promote the state-wide targets.

It is also satisfied that the CAP fulfils all legislative and most of the other government requirements, however most of the targets are not yet completely SMART.

The NRC has identified some areas of the CAP that require improvement to more fully comply with the Standard and promote achievement of the state-wide targets, including:

- collection and use of knowledge
- community engagement
- risk management
- monitoring and evaluation
- information management.

It also identified that the CMA needs to improve its priority-setting and decision-making systems. The NRC believes that the Sydney Metro CMA will be able to refine the CAP and CAP targets over time, to address these areas.

The CMA has demonstrated that it has good plans in place to achieve improvement. In addition, the actions recommended by the NRC will help the Sydney Metro CMA to focus on the key areas requiring improvement.

The sections below discuss in detail the NRC's assessment of the process used to develop the Sydney Metro CAP, whether the targets within this CAP will promote achievement of the state-wide targets, and whether the CAP fulfils the legislative requirements and reflects other specific government requirements.

The Sydney Metro CMA's plans for improvement are discussed in Chapter 3 and the NRC's recommended actions are discussed in Chapter 4.

2.1 Is the CAP consistent with the Standard for Quality NRM?

A CAP that is developed in accordance with the Standard and state-wide targets should contain clear priorities that were determined using a rigorous and transparent process. The NRC evaluated CAPs against the following question to test this requirement:

- Was the CAP developed using a rigorous and transparent process?

The Standard contains seven interdependent components which, when applied properly and together, should help CMAs make rigorous and transparent decisions and prioritise their NRM activities in a way that leads to sensible and integrated NRM outcomes at all scales.

Proper application of the Standard in developing a CAP should help CMAs to:

- use the best available information
- take appropriate account of scale issues to maximise the net benefit of investments
- capture opportunities for collaboration to maximise gains
- engage the community in a meaningful way
- effectively manage risks
- establish monitoring and evaluation systems
- effectively manage information.

The NRC examined the process the Sydney Metro CMA used to develop its CAP, and evaluated this process and the resulting CAP against the Standard. The NRC found that the CAP demonstrates a reasonable level of compliance with the seven components of the Standard. The NRC's assessment takes into account the fact that the Sydney Metro CMA is a relatively new organisation operating within a new regional model for NRM. Since 2005, the NRC has observed an improved level of compliance with the Standard,¹⁵ reflecting a developing but not yet mature organisation. Furthermore, the NRC has confidence that the CMA will continue to improve over time, based on the plans outlined in its CAP.

The NRC could discern the following key phases for development of the CAP:

- **Stakeholder engagement:** in 2006 the CMA engaged five Theme Expert Panels¹⁶ to participate in the deliberation and decision-making process for developing the CAP. The panels included representatives of local government, non-government environment organisations, regional staff from state agencies and SMCMA staff. Each panel met twice to discuss a range of key issues and undertake a review of current condition and trends. Recommendations from the expert panels about catchment and management targets were developed based on group discussion and consensus.
- **Community perspective:** the CMA issued community-wide invitations for individuals to register interest in planning for strategic NRM in the SMC region, and used the responses to form a community reference group. The group consisted of 90 people or organisations. The group was sent newsletters via email during 2006 with information about the preparation of the CAP, and given the opportunity to provide feedback. The CAP states that the CMA consulted the NSW Aboriginal Land Council, several local Aboriginal land

¹⁵ Based on an improvement between the 2006 and 2007 Systems Reviews.

¹⁶ The Expert Panels covered freshwater, estuarine and marine systems, biodiversity, soil, and land surface stability.

councils and elders and Aboriginal groups across the region. The CAP also states that volunteer groups provided input and feedback during its preparation.

- **Review in 2008:** SMCMA staff and Board members undertook a review of the draft catchment and management targets in 2008. The review included an update of key threats to highlight and reconfirm priority processes for management intervention. They did not significantly change the CAP targets at this time.

Table 2.1 summarises the NRC’s assessment of the Sydney Metro CAP development process and the resulting CAP against the components of the Standard. The table also lists selected evidence to support this assessment.

Table 2.1: NRC assessment of the CAP development process against the Standard

Component	Assessment of process against this component	Evidence
Collection and use of knowledge	<p>The CAP shows that the CMA followed a structured process for the collection and assessment of knowledge, however this does not always flow through to a clear and logical justification for the targets. The prioritisation process is not completely transparent and there is minimal quantitative information supporting the targets.</p> <p>The next step for the CMA is to enhance its decision-making and priority-setting processes at all levels to improve objectivity, rigour and transparency, and to incorporate new knowledge gathered in its proposed monitoring, evaluation and reporting program.</p>	<ul style="list-style-type: none"> ▪ The CAP provides general descriptions of the catchment’s natural resource assets, condition, trends and threats, and some social and cultural factors. ▪ <i>Section 4.3</i> of the CAP discusses how the CMA used expert panels to access knowledge and information. ▪ <i>Table 4.1</i> of the CAP identifies existing knowledge of the SMC region as well as knowledge quality issues and data gaps. Some management targets have been developed to address these gaps. ▪ Maps have been used to clearly present information. ▪ The CAP clearly identifies knowledge gaps in preparing management targets and actions to address them. ▪ The CAP states that by the end of 2010 the CMA will review and update the catchment and management targets to ensure that best available regional catchment knowledge and the results of a range of new analytical studies are taken into account.
Determination of scale	<p>The CAP suggests that the CMA considered some scale issues in developing the CAP.</p> <p>The next step for the CMA is to improve its processes for determining the optimal scale for management, including frameworks for decision-making and priority-setting.</p>	<ul style="list-style-type: none"> ▪ <i>Table 3.2</i> of the CAP demonstrates an understanding of the roles of other NRM organisations in the catchment, and the implications for the CMA. ▪ The CAP identifies spatial priorities for management action in some targets e.g. ‘top 20 priority sites’ (MTW1.6) and through mapping upfront in the CAP. ▪ <i>Section 4.5.3</i> of the CAP discusses time frames for catchment and management targets.

Component	Assessment of process against this component	Evidence
<p>Opportunities for collaboration</p>	<p>The CAP recognises the necessity for collaboration to achieve targets. The CAP specifies essential and supporting partners and also identifies key partners in each management target.</p> <p>The next step for the CMA is to develop and implement its proposed <i>Stakeholder Liaison Strategy</i> and to ensure that it evaluates the capacity for partners to collaborate when determining how to implement the CAP.</p>	<ul style="list-style-type: none"> ▪ <i>Table 3.1</i> of the CAP describes the roles and activities of a variety of NRM institutions, groups and organisations in the catchment. <i>Section 3.3</i> of the CAP describes each key partner in some detail, including their relationship with the CMA. ▪ <i>Section 5.5.1.1</i> explains how results from a survey conducted by DECC in 2006 were used to discern community values and attitudes to inform the community catchment targets. ▪ <i>Section 10.2.4</i> describes the CMA's proposed <i>Stakeholder Liaison Strategy</i> to guide future engagement practices, due to be implemented in mid-2009. ▪ Each management target identifies key partners for achieving the target.
<p>Community engagement</p>	<p>The CAP suggests that there was limited community involvement in the development of the CAP. It is not clear how the CMA will engage the community in the evaluation and review of the targets in 2010, or the CAP in 2017.</p> <p>The next step for the CMA is to develop and implement its proposed <i>Community Consultation Strategy</i>, identifying how the community can be involved in future reviews of the CAP.</p>	<ul style="list-style-type: none"> ▪ <i>Section 4.4</i> of the CAP describes how the community was involved in the development of the CAP. ▪ The CAP states that the SMCMA will develop a <i>Community Consultation Strategy</i> by mid 2009.
<p>Risk Management</p>	<p>The CAP demonstrates some consideration of risk in the process of target development. The CAP identifies the type of risks to achieving most management targets, but has not consistently outlined strategies to manage these risks. The CAP does not describe the risks to achieving catchment targets nor does it identify strategic risk for the organisation as a whole.</p> <p>The next step is for the CMA to undertake a risk assessment at the operational level and to develop and implement its proposed <i>Implementation Risk Management Strategy</i>.</p>	<ul style="list-style-type: none"> ▪ <i>Section 4.5.1</i> of the CAP describes the CMA's "risk management approach" to deciding priority issues. The CAP states that the most important risks to each biophysical theme are recognised in the catchment targets. ▪ Most management targets identify types of implementation risks, but few provide mitigation strategies. ▪ The CAP states that an <i>Implementation Risk Management Strategy</i> is currently being developed by the SMCMA which will evaluate implementation risks and incorporate mitigation of major risks into its priority setting and project management.

Component	Assessment of process against this component	Evidence
Monitoring and evaluation	<p>The CAP indicates that the CMA does not currently have sufficient benchmark data or performance indicators, but that these will be developed as a priority.</p> <p>The next step for the CMA is to finalise and implement its MER strategy, then review the CAP targets.</p>	<ul style="list-style-type: none"> ▪ <i>Section 10 (Measuring Progress, Adapting and Improving)</i> describes how the CMA intends to improve the CAP over time through MER processes. ▪ <i>Table 10.2</i> contains interim indicators for catchment and management targets, however not all targets are listed in the table. Not all of the interim indicators are logical nor appear to support measurement of progress towards targets. ▪ The CAP states that the SMCMA prepared a preliminary MER Strategy for operations and to evaluate progress towards regional targets in November 2007 but this is still being finalised. ▪ The management target tables include the monitoring and evaluation actions that are required to achieve each target, however it does not specify who will undertake these actions. In some instances the CAP states that these actions are still to be developed, in consultation with partners. ▪ The CAP states that by the end of 2010 the CMA will review and update the catchment and management targets, and a full CAP review will be undertaken in 2017.
Information management	<p>The CAP provides some confidence that the CMA has good information management systems in place.</p> <p>The next step is for the CMA to use its <i>Sydney Metro Information Management System (SIMS)</i> to improve its internal information management.</p>	<ul style="list-style-type: none"> ▪ <i>Table 4.1</i> of the CAP summarises some key studies used to underpin the targets, and describes their accessibility to natural resource managers. Accessibility to community is listed as “not known” for each study. ▪ Although the CAP contains useful information, it lacks well referenced information and evidence to support each target. ▪ <i>Appendix 1</i> of the CAP states that a Sydney Metro Information Management System (SIMS) is currently being developed. <i>Appendix 1</i> also describes how each type of information is electronically stored.

2.2 Are the CAP targets likely to promote the state-wide targets?

For the management and catchment targets within a CAP to promote the achievement of the state-wide targets they need to:

- have been developed using a rigorous and transparent process that was compliant with the Standard
- provide a basis for assessing performance, which means they need to be measurable (including having timeframes, units of measure, clear target levels, and performance indicators)
- be supported by information that demonstrates that they are relevant and achievable
- demonstrate linkages between the different sets of targets, which means that management targets should clearly contribute to catchment targets and catchment targets should clearly contribute to the state-wide targets.¹⁷

The NRC has some confidence that the Sydney Metro CAP targets will promote the state-wide targets. The NRC assessed the sets of CAP targets and found that they meet some of the above requirements. The CMA followed a reasonable process to develop the targets which demonstrated a reasonable level of compliance with the Standard for this point in time. The CMA has good plans in place that will enable it to improve its CAP over time, including developing and implementing a *Stakeholder Liaison Strategy*.

All the targets in the CAP include timeframes for achievement; however most do not include units of measure, quantified target levels or clearly identified baselines. The CAP includes interim indicators for most targets; however the indicators are largely qualitative and in some instances not logical. The CAP states that the CMA is working with State and Local Government partners to identify appropriate indicators and that developing appropriate activity style indicators is a priority for all targets.

The NRC found that while most of the targets are not easily measurable at this stage, the CAP includes a number of management targets that are specifically intended to improve baseline information and fill knowledge gaps. Activities that address key knowledge gaps are also identified as a high priority for investment over the next two to three years. The CAP states that the CMA proposes to audit progress against all targets annually and will review, evaluate and update the ongoing relevance of all targets by 2010, in response to new knowledge and information. These processes should provide a good basis for performance measurement in the future.

The CAP indicates that the CMA has good plans in place to identify monitoring needs and to establish a *Monitoring, Evaluation and Reporting Strategy* that, if supported by state-level monitoring and evaluation, should address these gaps and provide credible information to measure progress towards the targets.

¹⁷ These characteristics of targets correspond to the requirement of the Australian and NSW Government Joint Steering Committee that targets be 'Specific, Measurable, Achievable, Relevant and Timebound' (SMART). See Natural Resource Management Ministerial Council (2002) National Framework for Natural Resource Management (NRM) Standards and Targets. Available at <http://www.nrm.gov.au>.

The CAP contains some supporting information to explain why targets are relevant in *Table 5.1* and in the *Key Threats and Processes* section of each theme. The CAP also identifies what is already being done by other organisations and the achievements and gaps in each theme. The CAP identifies the types of risk to each management target and in some cases has also identified potential risk mitigation strategies. The CAP does not include an assessment of the overall risks to successful implementation of the CAP. The NRC considers that the CMA will be better able to identify, describe and mitigate these risks once it has undertaken its proposed risk audit and developed its proposed *Implementation Risk Management Strategy*.

The CAP depicts the general links between the state-wide targets and catchment targets, and between catchment targets and management targets. The relationship between specific catchment targets and the state-wide targets is summarised in *Figure 2.1* and in tables 5.2, 5.4, 5.6 and 5.9 in *Section 5*. The management target tables in *Sections 6-9* contain a section on *Benefits and Synergies and Connections* which describe the multiple environmental benefits and flow-on impacts of specific targets. However, there are some inconsistencies in the way that the CAP differentiates between catchment targets and management targets, particularly in the *Aquatic Systems* theme. In particular, the NRC found that some of the targets identified as management targets are really catchment targets, and some of the targets overlap. The next step for the CMA will be to improve the measurability and achievability of its CAP targets when the CMA undertakes its 2010 review.

2.3 Does the CAP meet other government requirements?

CAPs need to fulfil a range of legislative requirements, including those under the *Catchment Management Authorities Act 2003*, the *Native Vegetation Act 2003*¹⁸ and the *Threatened Species Conservation Act 1995*. CAPs also need to reflect other specific requirements nominated by the NSW Government and JSC.

The NRC has assessed the Sydney Metro CAP against each of these requirements and priorities.

The NRC found that the CAP meets all legislative requirements (see *Table 2.2*) and most other government requirements (see *Table 2.3*). The management and catchment targets included in the CAP are not completely SMART¹¹ at this stage, but as *Section 2.2* discussed, the NRC believes that the Sydney Metro CMA will work towards improving its targets over time, noting that the CMA intends to review its CAP targets in 2010.

In developing its findings, the NRC has consulted with the Department of Environment and Climate Change, the Department of Primary Industries, the Department of Planning, the NSW Department of Water and Energy, and the JSC.

¹⁸ The *Native Vegetation Act 2003* does not apply in the Sydney Metro region

Table 2.2: NRC assessment of the CAP against legislative requirements

Legislative requirement	Finding
Biodiversity certification	<p>The NRC considers that the Sydney Metro CAP, and the CMA's systems that underpin it, meet the requirements for biodiversity certification.</p> <p>The SMCMA has developed catchment and management targets to address significant pressures or threats to biodiversity under the biodiversity and aquatic themes. The CAP identifies specific priority areas and localities for investment under relevant management targets in the native vegetation, threatened species and endangered ecological communities, and invasive species area (<i>Sections 6.1, 6.2 and 6.3</i> respectively). The CAP also lists threatened and endangered ecological communities (<i>Appendix 4</i>).</p> <p>The CAP details targets and activities for biodiversity conservation across terrestrial (biodiversity theme) and aquatic habitats (aquatic systems theme).</p> <p>The CMA has identified potential collaborators in biodiversity conservation actions; however it has not specified which actions the identified partners will undertake.</p>
Environmental planning instruments and other natural resource plans	<p>The CAP contains a reference list that includes state environmental planning policies and natural resource plans; however it does not describe how these have been taken into account in development of the CAP. In some targets, relevant legislation and plans are referenced.</p> <p>The CAP also contains a table of key legislation and policy for NRM relevant to the Sydney Metro region at the international, national, state, regional and local scales, but it is not clear how these have been used in the development of the CAP (<i>Appendix 2</i>).</p> <p>The CAP makes little reference to surface water sharing plans that are currently in preparation for the greater metropolitan region.</p>
Environmental Water Trust Fund	<p>Not applicable, as the CMA has not established an Environmental Water Trust Fund.</p>

Table 2.3: NRC assessment of the CAP against state and national priorities

State/national priority	Finding
JSC Investor Preferences	<p><i>Table 3.3</i> of the CAP identifies investor preferences and links them to the relevant catchment and management targets. The table also links the catchment and management targets to investor preferences.</p> <p>Given the timing of the delivery of the CAP and the announcement of the ‘Caring for Our Country’ program, it was not anticipated that the CAP would make reference to the program. That being said, it appears that the targets within the CAP will contribute to the three national priorities that are relevant to the SMCMA region i.e. “biodiversity and national icons”, “coastal environments and critical aquatic habitats”, and “community skills, knowledge and engagement”.</p>
SMART targets	<p>Most of the targets in the CAP are not SMART, largely because they do not have specified target levels and performance indicators. In <i>Section 4.6 (p.4.14)</i> the CAP states that, to accommodate uncertainty about baseline resource condition, the SMCMA has established catchment and management targets that are generally not as specific or measurable as would be desirable. However, the NRC considers that the CMA’s targets to address knowledge gaps followed by a review of its targets in 2010 are likely to improve the CMA’s targets.</p> <p>The NRC considers the CMA should make information supporting the achievability of the targets more accessible within the CAP as it updates the CAP.</p>
Native vegetation management priorities and programs	<p>Not applicable to Sydney Metro CMA.</p>
Salinity targets	<p>The CAP has one management target related to salinity (<i>MTLD1.2 p.8.8 Table 8.2</i>). Although the State Salinity Strategy is listed in the reference list, it is not clear how this was used to inform the development of the target. The CAP also identifies the NSW Salinity Strategy: Local Government Salinity Initiative as a source of funds for investment (<i>p.3.5</i>).</p>
National framework for NRM standards and targets	<p>The NRC considers that the CAP targets are partially consistent with the 10 ‘national matters for targets’, as specified in the <i>National Framework for NRM Standards and Targets</i>.</p> <p>The CAP shows the linkages between catchment targets and national matters for targets; however, the CAP does not fully comply with the National Framework, as many of the targets are not yet SMART.</p>
Blueprint evaluation	<p>The CAP states that it builds on the issues and governmental/community responses identified in the Sydney Harbour Catchment Blueprint (2003) and Southern Sydney Catchment Blueprint (2003) (<i>p.1.4</i>). The CAP states that expert panels discussed the key issues previously highlighted in the Catchment Blueprints (<i>p.4.9</i>), but the process for incorporating new knowledge gained through implementation of the Blueprints was not discussed.</p>
NSW Government Statements of Intent	<p>The objectives contained in the Healthy Rivers Commission’s Independent Enquiry, from which the Statements of Intent were derived, are now reflected in the Botany Bay Coastal Catchment Initiative (BBCCI). The ultimate goal of this initiative is to develop an agreed Water Quality Improvement Plan. This goal is reflected in management target MTW3.1.</p> <p>Whilst there is not a clear link between the Statement of Intent and the BBCCI described in the CAP, there is a clear link between the BBCCI and the targets.</p>

3 NRC's assessment of the CMA's capacity to improve the CAP over time

The NRC assessed whether the Sydney Metro CMA will continue to improve its CAP's compliance with the Standard and likelihood of promoting achievement of the state-wide targets. The NRC believes that the CMA will continue to improve, for the following reasons:

- the NRC has observed improved compliance with the Standard between the Systems Review undertaken in 2005 and 2007
- the CMA has demonstrated that it has good plans in place to continue to improve compliance against each component of the Standard, to refine the catchment and management targets, and to increase its organisational capabilities
- the actions the NRC has recommended will encourage the CMA to focus on the key areas that require improvement and will promote accountability to the NRC, other CMAs, investors and the broader NSW community
- the NRC will regularly review the CMA's progress of these recommended actions, which will provide an additional incentive for the CMA to address key issues and demonstrate progress within reasonable timeframes.

3.1 The CMA's plans to improve the CAP

The NRC has assessed the Sydney Metro CMA's plans for improving the CAP over time, based on its discussions with the CMA during the CAP review process and its evaluation of the CAP. The NRC is satisfied that the CMA has good plans and processes in place for improving its CAP, the CAP's compliance with the Standard and promotion of the state-wide targets. It notes that many of these plans are explained in the CAP, so that they are clear to investors and the broader community.

Table 3.1 summarises the NRC's assessment of the Sydney Metro CMA's plans to improve its CAP against each component of the Standard. The NRC believes it is important that the CMA implements, reviews and refines all of these plans and processes, and then updates the CAP within 18 months. In addition, it believes the CMA should give particular attention to improving collection and use of knowledge, community engagement, risk management, monitoring and evaluation, and improving its priority-setting and decision-making systems. Improvements in these areas will be crucial to the ongoing success of the CMA as an organisation.

Table 3.1: NRC's assessment of the Sydney Metro CMA's plans to improve

Component	Plans to improve
Collection and use of knowledge	<ul style="list-style-type: none"> ▪ The CAP states that the CMA proposes to facilitate a range of programs, involving multiple stakeholders, which will strengthen collection and analysis of NRM data in the region ▪ The CAP describes specific priorities for improving NRM knowledge in the region and provides further detail about projects which will help to fill these gaps ▪ The CAP states that the CMA is working with State and Local Government partners to identify appropriate indicators for catchment and management targets and a meaningful and affordable monitoring and reporting program for these parameters and that this will result in a suite of baseline monitoring programs to meet specific regional needs ▪ The CMA is developing a <i>Community Consultation Strategy</i> (in place one year from endorsement of the CAP) which will include a process for obtaining feedback from volunteers about the success of projects in which they have been involved. This information will contribute to the CMA's review of activity success and its development of improved programs ▪ The CAP states that the CMA proposes to audit progress against all targets annually and will review, evaluate and update the ongoing relevance of all targets by 2010, in response to new knowledge and information ▪ The CAP states that activities that address key knowledge gaps are identified as a high priority for investment over the next two to three years. The results of these targeted studies will be used to inform the review of all CAP targets and activities in 2010 ▪ The CMA has undertaken a comprehensive assessment of the current state of available maps, data and information. This will be updated bi-annually.
Determination of scale	<ul style="list-style-type: none"> ▪ The CAP states that the CMA proposes to develop communication with (including potential involvement in) the DECC working group overseeing the preparation of the NSW State of the Environment Report, which will assist in gathering baseline information at the regional scale ▪ The CMA commenced State Agency meetings in February 2008 to facilitate institutional scale issues ▪ The CAP states that the CMA will establish a regional scale MER coordination group to facilitate the design of regional scale indicators and data collection.
Opportunities for collaboration	<ul style="list-style-type: none"> ▪ The CAP states that the CMA is currently preparing a <i>Stakeholder Liaison Strategy/Program</i> to guide future engagement practices which it states will be adopted within one year of the endorsement of the CAP ▪ The CMA will implement a register of State agency liaison meetings to ensure a systematic format and provide transparency ▪ The CMA will develop a register of their involvement in regional organisations' meetings, recording the extent to which the CMA is involved and their influence on the decision-making process ▪ The CAP states that the CMA will take immediate steps to update and inform State and Local Government about its position on natural resources issues and the regional priorities that it has identified in the CAP ▪ The CAP states that the CMA will prepare regular State of the Catchment reports which will update stakeholders about the priority issues to be addressed in the CMAs forthcoming investment strategies ▪ The CAP states that the CMA will develop systems and mechanisms for reporting the outcomes of individual projects and progress in implementing the CAP to local and regional stakeholders. This is expected to include web based

Component	Plans to improve
	<p>information, newsletters, open days and media material</p> <ul style="list-style-type: none"> ▪ The CAP contains catchment and management targets that aim to improve stakeholder focus and collaboration.
Community engagement	<ul style="list-style-type: none"> ▪ The CAP states that the SMCMA will develop a <i>Community Consultation Strategy</i> by mid 2009, which will focus on connecting local communities to natural resource information, skill development, how to connect with other groups and reports of progress towards improved natural resource condition ▪ The CMA intends to develop a format for a communications plan that is suitable for use in implementing any project ▪ The CAP states that the CMA will ensure that information about the 2010 review of CAP targets, including the review process and outcomes, is available to all stakeholders and the regional community ▪ The CAP contains catchment and management targets that aim to improve community capacity to participate in NRM activities.
Risk management	<ul style="list-style-type: none"> ▪ The CAP states that the CMA will undertake a risk audit (which the NRC understands will include a risk assessment), at the operational level and use the results as the basis of a framework that addresses each of the identified risks ▪ The CAP states that the CMA is currently developing an <i>Implementation Risk Management Strategy</i> which will evaluate implementation risks and incorporate mitigation of major risks into its priority setting and project management.
Monitoring and evaluation	<ul style="list-style-type: none"> ▪ The CAP states that the CMA is developing a <i>Monitoring, Evaluation and Reporting Strategy</i> for its operations and to evaluate progress towards regional natural resource targets. Once implemented, this should assist the CMA to quantify and demonstrate progress towards targets, and use the results to guide improved practice. The CMA's draft MER strategy include four monitoring programs: condition of natural resources (catchment targets, linked to state-wide targets), implementation of the CAP (management targets), status and outcomes of individual projects (activities), adaptive management plan (see below) ▪ The CAP states that the CMA is preparing an <i>Adaptive Management Strategy</i> to outline the process for reviewing, refocusing and improving management strategies and activities and investment priorities ▪ The CAP contains catchment and management targets that focus on developing regional MER ▪ The CMA will include an MER component, such as performance indicators, for all projects including the identification of performance indicators ▪ The CMA will assess its draft MER Strategy against the NSW MER Framework.
Information management	<ul style="list-style-type: none"> ▪ The CMA indicates that the Sydney Metropolitan CMA Information Management System (SIMS) has been implemented since submission of the CAP ▪ The CMA is investigating opportunities to further integrate SIMS into the revised DECC SAP system ▪ The CAP contains a management target to collect information from land managers.

4 NRC's recommendation

In accordance with Section 13 (b) of the *Natural Resources Commission Act 2003*, the NRC recommends that the Minister approve the Sydney Metro Catchment Action Plan¹⁹ without alteration.

The NRC further recommends that the Minister require the CMA²⁰ to undertake a review of the Catchment Action Plan within 18 months of approval to incorporate its progress on the following actions:

- a) advancing its processes for transparent decision-making, at all levels of the CMA, that comply with the Standard
- b) undertaking "*high level stakeholder engagement to refine investment priorities and to maximise commitment to agreed region-wide targets and collaborative actions.*"²¹
- c) completing and implementing the *Stakeholder Liaison Strategy*, particularly focussed at the essential partners identified in the CAP, and include the key principles of this Strategy in the CAP
- d) completing and implementing the *Community Consultation Strategy*
- e) continuing its plans to undertake a risk audit at the operational level, and to complete and implement the *Implementation Risk Management Strategy* to ensure a comprehensive system for identifying, assessing and managing risks
- f) completing and implementing the *Monitoring, Evaluation and Reporting Strategy* including the *Adaptive Management Strategy*.²²

The NRC considers that this approach will allow the Sydney Metro CMA to 'get on with business', while also ensuring continuous improvement in the CAP document and implementation. The above actions are discussed in detail below:

Recommendation a) acknowledges the transparent process describing the Board's involvement in identifying priorities in the CAP. It should encourage the CMA to build on its existing decision-making processes and to make them more robust, transparent and consistent with the Standard. This should help the CMA to clearly record, communicate and justify its future decisions about prioritisation of issues, targets, management actions, priority investment regions. The CMA should consider the range of existing tools, such as the NRM toolbar²³, and collaborate with other CMAs, state agencies and research organisations to build a better decision-making framework.

Recommendation b) should encourage the CMA to develop and implement processes for investment priority-setting, at all levels of the CMA, with particular focus on the engagement of priority stakeholders. It should also help the CMA to make its consideration of scale issues more explicit and to identify the optimal scale for its activities.

¹⁹ Under Section 23 (1) of the *Catchment Management Authorities Act 2003*.

²⁰ Under Section 26 (1) of the *Catchment Management Authorities Act 2003*.

²¹ *Sydney Metropolitan Catchment Management Authority Catchment Action Plan* (2008), p4.9

²² The continued development of the *Monitoring, Evaluation and Reporting Strategy* should ensure the CMA develops targets which are more 'Specific, Measurable, Achievable, Relevant and Timebound' (SMART). See Natural Resource Management Ministerial Council (2002) *National Framework for Natural Resource Management (NRM) Standards and Targets*. Available at <http://www.nrm.gov.au/publications/standards/index/html>.

²³ <http://www.nrmtoolbar.net.au/>

Recommendation c) should ensure that the CMA establishes effective means for continuing to engage and collaborate with existing and potential 'Essential' and 'Supporting Partners' through CAP implementation and review. It will allow the CMA to evaluate potential partnerships on the basis of risks, costs and benefits and capacity to collaborate, so that partnerships contribute to maximising gains and minimising costs. Recommendation c) will further support processes working towards Recommendation b).

Recommendation d) should encourage the CMA to build on its existing community engagement processes and encourage community participation in the achievement of CAP targets and future reviews of the CAP.

Recommendation e) the risk audit and *Implementation Risk Management Strategy* should assist the CMA to systematically identify, assess and manage risks at all levels of its business, including Board strategic decision-making, target prioritisation, investment program planning, and project planning and implementation. It should encompass and build on the types of risks listed in the CAP, ensure that risks inherent in collaboration are included and that all these risks are reviewed and managed as part of an ongoing risk management process. By developing processes that effectively identify and manage risk, the CMA will be more able to avoid significant mistakes/failures and to provide confidence to stakeholders and investors.

Recommendation f) should ensure that the CMA implements the *Monitoring, Evaluation and Reporting Strategy* it has described in the CAP, which includes an *Adaptive Management Strategy*. This will enable the CMA to clearly map the catchment priorities, the catchment and management targets that deliver on these priorities, the relationships and assumptions between these targets, and the monitoring and evaluation required to show progress. Development of the *Strategy* should help the CMA to obtain the information necessary to refine targets, including making targets more measurable and better demonstrating that they are relevant and achievable, thereby improving promotion of the state-wide targets. The *Strategy* will also support continual improvement and adaptive management within the CMA.

4.1 How should the CMA demonstrate progress?

The NRC will require the Sydney Metro CMA to report 6-monthly, in a letter, on its progress in undertaking the actions detailed above. This will require the CMA to assess and report on its own progress at regular intervals.

This kind of regular self-assessment is important for the CMA's own adaptive management, and will also create opportunities for it to seek guidance or support where necessary.

4.2 How will progress be monitored?

Regular review of the CMA's progress should assist the CMA in achieving and demonstrating continuous improvement. It should also highlight any additional obstacles to the CMA's progress. In addition, it should provide investors with increased confidence as they move beyond 2008/09 and into the next funding cycle.

The NRC will:

- require the Sydney Metro CMA to report 6-monthly, in a letter to the NRC, on its progress in taking the actions listed in Section 3.2

- audit the effectiveness of the implementation of the most recent version of the Sydney Metro CAP within 2 years of the date of approval, or earlier if progress in taking the actions is not adequate.

4.3 What can the government do to support this CMA?

The NRC considers that to successfully implement the CAP, the Sydney Metro CMA will require support from the government to:

- enable the CMA to enhance its internal knowledge and information management systems
- develop an effective monitoring and evaluation program, given the limited funding available and historic lack of clarity on roles and responsibilities for monitoring and evaluation in NSW
- coordinate NRM efforts in the catchment and achieve the targets, given the coastal location, the population pressures in the catchment and the complexity of institutional, NRM and land use planning arrangements in the region.

These issues are also relevant to other CMAs, and are more fully explained in the NRC's consolidated report on all CAPs.

